

**What is claimed is:**

1. A pneumatic servo valve including a hollow main body with a supply port, a discharge port and an exhaust port; a sleeve which is contained in a hollow portion of the main body and has slots communicating with the respective ports, and a chamber therein; a spool axially slidably installed within the chamber to control the flow of a fluid into the respective ports according to the position thereof; a torque motor installed at one side of the main body to control the position of the spool in response to electrical signals; and a spool position detecting means for compensating positional errors by receiving the feedback position of the spool, comprising:

a spool holding means including a ball nut 60 which is engaged, via a ball, with a helical groove formed on a connection rod of the spool connected to the torque motor and rotates when the spool moves linearly, and an electronic brake for holding the ball nut not to rotate when the spool is stopped.

2. The valve as claimed in claim 1, wherein the spool position detecting means is a rotary encoder for detecting the position of the spool by sensing the number of revolutions of the ball nut.